

Title (en)  
Penicillins, a process for the preparation and compositions containing them.

Title (de)  
Penizilline, ein Verfahren zur Herstellung und sie enthaltende Zusammensetzungen.

Title (fr)  
Pénicillines, un procédé de préparation et compositions les contenant.

Publication  
**EP 0090656 A1 19831005 (EN)**

Application  
**EP 83301786 A 19830330**

Priority  
GB 8209426 A 19820331

Abstract (en)  
[origin: ES8405411A1] A compound of formula (1) or a pharmaceutically acceptable salt or in vivo hydrolysable ester thereof: < IMAGE > (I) wherein R1 is phenyl, substituted phenyl or a 5- or 6-membered heterocyclic ring containing up to three heteroatoms selected from oxygen, sulphur or nitrogen, optionally substituted with hydroxy, amino, halogen or C1-6 alkoxy X represents < IMAGE > +TR < IMAGE > wherein RY is methyl or acetyl R2 and R3 may be the same or different and each is hydrogen, an aryl group, a heterocyclyl group or a C1-6 alkyl group optionally substituted by an aryl group or a heterocyclyl group and R4 is hydrogen, a C1-6 alkylcarbonyl group, an aryl group, a heterocyclyl group, a C1-6 alkyl group optionally substituted by an aryl group or a heterocyclyl group R5 represents, hydrogen, methoxy or -NHCHO and Y is: < IMAGE > wherein Y1 is oxygen, sulphur or -CH2- and Z represents hydrogen, halogen or an organic group such as C1-4 alkoxy, -CH2Q or -CH=CH-Q wherein Q represents hydrogen, halogen, hydroxy, mercapto, cyano, carboxy, carbamoyloxy carboxylic ester, C1-4 alkyloxy, acyloxy, aryl, a heterocyclyl group bonded via carbon, a heterocyclylthio group or a nitrogen containing heterocyclic group bonded via nitrogen.

IPC 1-7  
**C07D 499/68**; **C07D 501/32**; **A61K 31/43**; **A61K 31/545**

IPC 8 full level  
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CPC (source: EP US)  
**A61P 31/04** (2017.12 - EP); **C07D 231/20** (2013.01 - EP US); **C07D 231/26** (2013.01 - EP US); **C07D 499/00** (2013.01 - EP US)

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• [Y] US 3939150 A 19760217 - MURAKAMI MASUO, et al  
• [Y] EP 0023045 A1 19810128 - AJINOMOTO KK [JP]  
• [Y] GB 1507623 A 19780419 - SUMITOMO CHEMICAL CO

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**EP 83301786 A 19830330**; AU 1294383 A 19830329; ES 521192 A 19830330; ES 527711 A 19831201; JP 5498983 A 19830330; NZ 20373483 A 19830329; US 47995383 A 19830329; ZA 832226 A 19830329